R3G250-AD59-32

EC centrifugal fan

backward curved, single inlet



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G250-AD59-32**	
Motor	**M3G084-CA**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min^{-1}	2930
Power input	W	202
Current draw	A	4.25
Min. ambient temperature	°C	- 25
Max. ambient temperature	°C	+60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		52.4	41.4	45.4
Efficiency grade N		69	58	62
Power input P_e	kW	0.26		
Air flow q_v	m³/h	925		
Pressure increase p_{fs}	Pa	480		
Speed n	min^{-1}	2850		

Data established at point of optimum efficiency

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Technical features

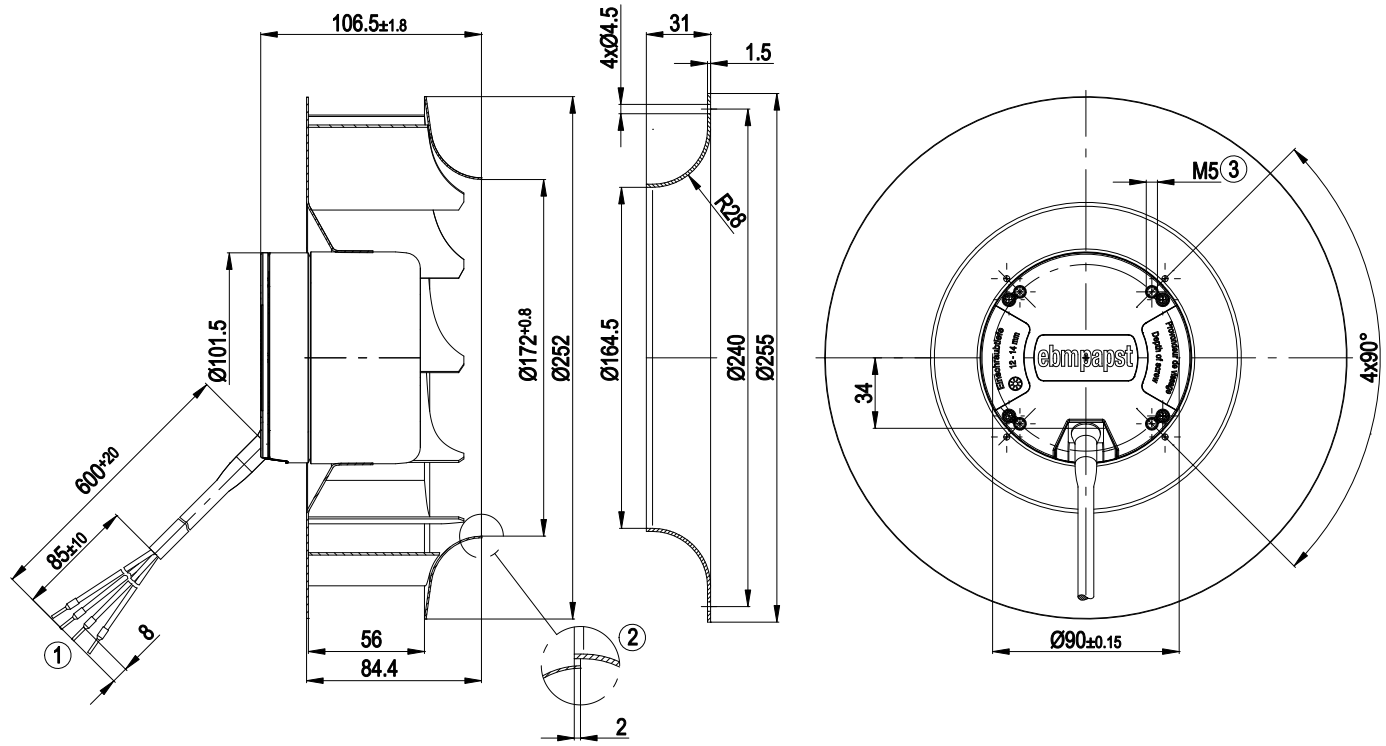
Mass	2.92 kg
Size	250 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-dip galvanised
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Tach output - Over-temperature protected motor
EMC interference immunity	Acc. to EN 61000-6-2
EMC interference emission	Acc. to EN 55022 (Class B)
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	UL 1004-1; CSA C22.2 Nr.100

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Product drawing



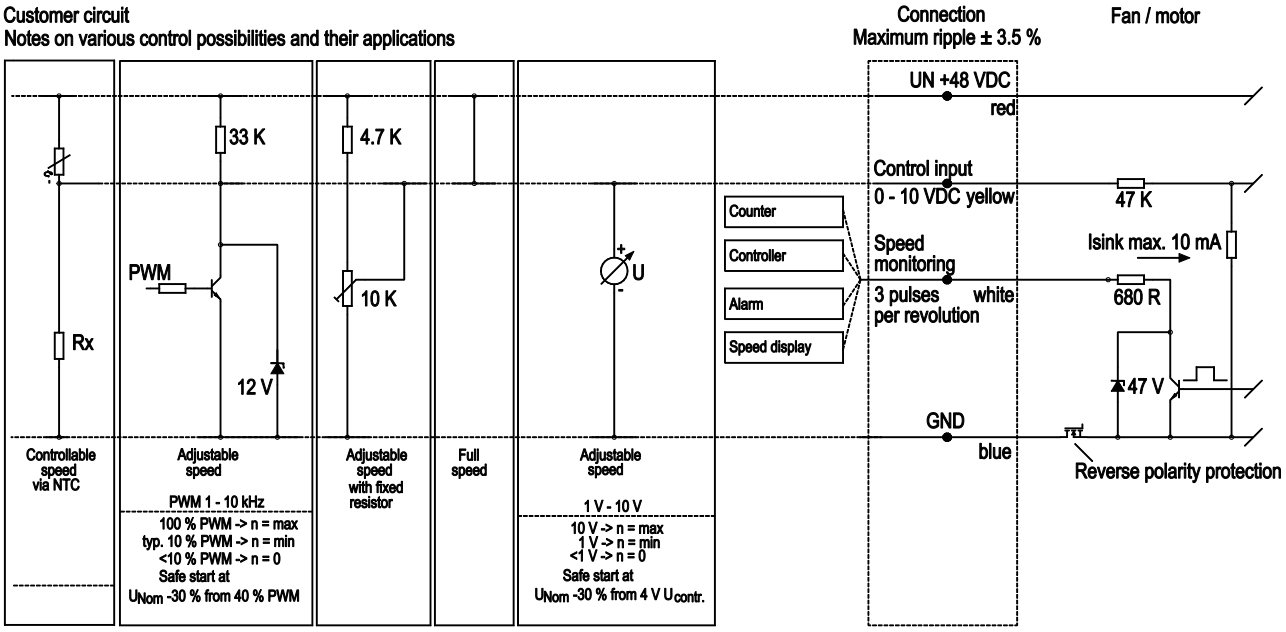
1	Connecting line AWG16, 4 x crimped core-end sleeves
2	Accessory part: inlet nozzle 96359-2-4013 not included in the standard scope of delivery; other inlet nozzles on request
3	Depth of screw 12-14 mm

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Connection screen

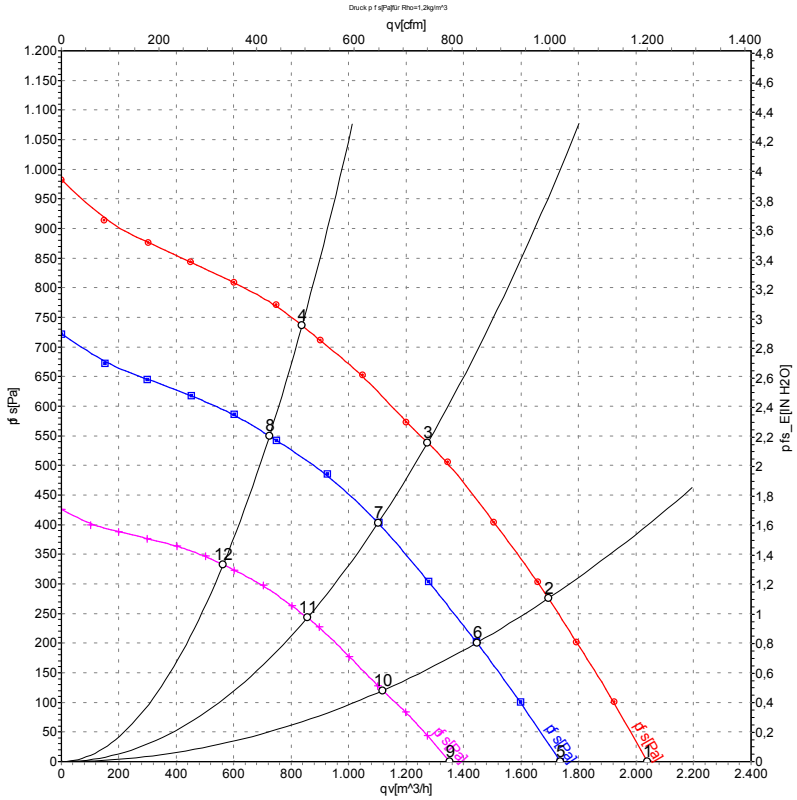


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Charts: Air flow



Measurement: LU-115871
Measurement: LU-115870
Measurement: LU-115873

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	n	P_{ed}	I	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa
1	57	3400	311	5.49	2040	0
2	57	3330	369	6.52	1695	275
3	57	3290	402	7.11	1275	540
4	57	3320	376	6.64	840	735
5	48	2930	202	4.25	1735	0
6	48	2880	240	5.03	1445	200
7	48	2850	265	5.55	1100	400
8	48	2875	247	5.12	725	550
9	36	2270	97	2.70	1350	0
10	36	2240	115	3.23	1120	120
11	36	2225	127	3.55	855	243
12	36	2240	119	3.29	565	332

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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